

Amendments to the Claims

1. (Currently Amended): A method of etching silicon nitride substantially selectively relative to an oxide of ~~at least one of silicon and~~ aluminum, comprising:

providing a substrate comprising silicon nitride and an oxide of aluminum; and

exposing the silicon nitride and the oxide to an etching solution comprising HF and an organic HF solvent under conditions effective to etch the silicon nitride substantially selectively relative to the oxide.

2. (Original): The method of claim 1 comprising providing the substrate to comprise an oxide of silicon and an oxide of aluminum, with the exposing being effective to etch the silicon nitride substantially selectively relative to each of said oxides.

3. (Original): The method of claim 1 wherein the organic HF solvent comprises an alcohol.

4. (Original): The method of claim 3 wherein the alcohol is aliphatic.

5. Currently Amended): The method of claim 3 wherein the alcohol is ~~at least one selected from the group consisting of alicyclic, aromatic, and heterocyclic~~ alicyclic.

6. (Original): The method of claim 3 wherein the organic HF solvent comprises ethanol.

7. (Original): The method of claim 1 wherein the organic HF solvent comprises a polyol.

8. (Original): The method of claim 7 wherein the polyol has a boiling point of at least 150°C.

9. (Original): The method of claim 7 wherein the polyol comprises a glycol.

10. (Original): The method of claim 7 wherein the polyol comprises a glycerol.

11. (Original): The method of claim 7 wherein the polyol comprises a carboxylic acid.

12. (Original): The method of claim 1 wherein the etching solution comprises from 0.1% to 50% by weight water.

13. (Original): The method of claim 1 wherein the etching solution comprises from 0.1% to 15% by weight water.

14. (Original): The method of claim 1 wherein the etching solution comprises from 0.1% to 5% by weight water.

15. (Original): The method of claim 1 wherein the etching solution comprises from 0.1% to 1.0% by weight water.

16. (Original): The method of claim 1 wherein the etching solution has from 0% to less than 0.1% by weight water.

17. (Original): The method of claim 1 wherein the etching solution comprises from 0.01% to 50% by weight HF.

18. (Original): The method of claim 1 wherein the etching solution comprises from 0.1% to 15% by weight HF.

19. (Original): The method of claim 1 wherein the etching solution comprises from 1% to 5% by weight HF.

20. (Original): The method of claim 1 wherein the etching solution consists essentially of from 0.01% to 50% by weight HF, organic HF solvent, and from 0.1% to 50% by weight water.

21. (Original): The method of claim 1 wherein the etching solution consists essentially of from 0.1% to 15% by weight HF, organic HF solvent, and from 0.1% to 10% by weight water.

22. (Original): The method of claim 1 wherein the etching solution consists essentially of HF and organic HF solvent.

23. (Original): The method of claim 1 wherein the conditions comprise a temperature of at least 60°C.

24. (Original): The method of claim 1 wherein the conditions comprise a temperature of from 70°C to 90°C.

25. (Original): A method of etching silicon nitride substantially selectively relative to aluminum oxide, comprising:

providing a substrate comprising silicon nitride and a densified aluminum oxide; and

exposing the silicon nitride and the densified aluminum oxide to an etching solution comprising HF and an organic HF solvent under conditions effective to etch the silicon nitride substantially selectively relative to the densified aluminum oxide.

26. (Original): The method of claim 25 wherein the organic HF solvent comprises an alcohol.

27. (Original): The method of claim 26 wherein the alcohol is aliphatic.

28. (Currently Amended): The method of claim 26 wherein the alcohol is ~~at least one selected from the group consisting of alicyclic, aromatic, and heterocyclic~~ alicyclic.

29. (Original): The method of claim 26 wherein the organic HF solvent comprises ethanol.

30. (Original): The method of claim 25 wherein the organic HF solvent comprises a polyol.

31. (Original): The method of claim 30 wherein the polyol has a boiling point of at least 150°C.

32. (Original): The method of claim 30 wherein the polyol comprises a glycol.

33. (Original): The method of claim 30 wherein the polyol comprises a glycerol.

34. (Original): The method of claim 30 wherein the polyol comprises a carboxylic acid.

35. (Original): The method of claim 25 wherein the etching solution comprises from 0.1% to 50% by weight water.

36. (Original): The method of claim 25 wherein the etching solution comprises from 0.1% to 15% by weight water.

37. (Original): The method of claim 25 wherein the etching solution comprises from 0.1% to 5% by weight water.

38. (Original): The method of claim 25 wherein the etching solution comprises no more than 1% by weight water.

39. (Original): The method of claim 25 wherein the etching solution has from 0% to less than 0.1% by weight water.

40. (Original): The method of claim 25 wherein the etching solution comprises from 0.01% to 50% by weight HF.

41. (Original): The method of claim 25 wherein the etching solution comprises from 0.1% to 15% by weight HF.

42. (Original): The method of claim 25 wherein the etching solution comprises from 1% to 5% by weight HF.

43. (Original): The method of claim 25 wherein the etching solution consists essentially of from 0.01% to 50% by weight HF, organic HF solvent, and from 0.1% to 50% by weight water.

44. (Original): The method of claim 25 wherein the etching solution consists essentially of from 0.1% to 15% by weight HF, organic HF solvent, and from 0.1% to 10% by weight water.

45. (Original): The method of claim 25 wherein the etching solution consists essentially of HF and organic HF solvent.

46. (Original): The method of claim 25 wherein the conditions comprise a temperature of at least 60°C.

47. (Original): The method of claim 25 wherein the conditions comprise a temperature of from 70°C to 90°C.

Claims 48-50 (Canceled).

51. (New): The method of claim 3 wherein the alcohol is aromatic.

52. (New): The method of claim 3 wherein the alcohol is heterocyclic.

53. (New): The method of claim 1 wherein the etching solution comprises 0% by weight water.

54. (New): The method of claim 26 wherein the alcohol is aromatic.

55. (New): The method of claim 26 wherein the alcohol is heterocyclic.

56. (New): The method of claim 25 wherein the etching solution comprises 0% by weight water.